

Exercise walk-through

Production of goods and services ■ 4.1

eXercise

You must be able to

- describe job, batch and flow production
- explain productivity and how to raise it
- explain lean production and JIT inventory

Method — Methods of production

- **Job** 单件生产: one item to order (a wedding cake). **Batch** 批量生产: a group, then switch. **Flow** 流水线生产: non-stop line (cars) — low unit cost but needs high demand.
- **Productivity** 生产率: output per worker/machine; raise it by training, technology, motivation.
- **JIT** 准时制: materials arrive as needed → little **inventory** 库存 → low storage cost, but a late delivery stops production.

Answer shapes: $K + App + An + Ev$ (a justified judgement, for “do you think” questions).

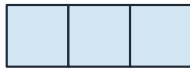
Method — Methods of production

job



one unique
item at a time

batch



a group, then
switch to another

flow



a non-stop
line

The three methods of production

Practice 2.1 ■ 2 marks

Define the term *productivity*.

Solution 2.1

Worked steps

how much output each worker or machine produces in a set time (2 for a clear definition; 1 for a partial idea).

Practice 2.2 ■ 2 marks

State the difference between *job* and *flow* production.

Solution 2.2

Method: Methods of production

Worked steps

job production makes one item at a time to order; flow production makes goods non-stop on a moving line (2 for a clear difference; 1 for a partial idea).

Practice 2.3 ■ 2 marks

Define the term *just-in-time (JIT)*.

Solution 2.3

Worked steps

a system where materials arrive just as they are needed, so very little inventory is held (2 for a clear definition; 1 for a partial idea).

Exam-style 3.1 ■ 2 marks

Identify two ways a business could raise its productivity.

Solution 3.1

Method: Methods of production

Worked steps

any two of: train workers; use better machines/technology; improve motivation; organise work better ($1 + 1$).

Exam-style 3.2 ■ 6 marks

Explain two benefits to a manufacturer of using flow production.

Solution 3.2

Method: Methods of production

Worked steps

[6] For **each** of two benefits: K 1 + An up to 2 — e.g. *low unit cost*: machines run non-stop making many identical units → economies of scale → low cost per item. *Consistent quality*: a standard line → every unit is the same → fewer faults. Maximum 3 each.

Exam-style 3.3 ■ 6 marks

A furniture maker produces special, made-to-order pieces. Do you think it should switch to flow production? Justify your answer.

Solution 3.3

Method: Methods of production

Worked steps

[6] Both sides + judgement. **For:** flow production lowers the unit cost and raises output. **Against:** flow production makes identical goods, but this maker sells *special, made-to-order* pieces, so job production fits its product; flow lines are costly to set up and remove the custom appeal. **Judgement (Ev):** the maker should keep job production because its product is custom — flow production only suits high, steady demand for identical goods.